

(I) transforming existing industries in the United States into 21st century industries that use and produce clean energy; and

(J) enhancing the national security of the United States, including the cybersecurity of the electric power grid; and

(3) to succeed, the goals described in paragraph (1) and the objectives described in paragraph (2) should be accomplished through efforts that—

(A) electrify the activities of high-emissions sectors, such as the residential and commercial construction, transportation, and industrial sectors, including by—

(i) supporting and incentivizing the residential and commercial deployment of electric technologies, including battery storage systems, electric heat pumps, electric induction stoves, electric vehicle chargers, and electric water heaters;

(ii) supporting the expansion of residential, commercial, and public electric vehicle charging infrastructure, including in rural areas and low- and moderate-income communities;

(iii) supporting the widespread electrification of public transportation systems, including the expansion of public transportation systems in rural and suburban communities; and

(iv) investing in research, development, demonstration, and deployment programs for electrification of key industrial processes;

(B) increase the deployment of zero-emission electricity resources, including by—

(i) expanding investment in zero-emission electricity generation;

(ii) lowering the permitting and hardware costs, and streamlining the process, of installing distributed energy systems;

(iii) improving the permitting and leasing processes for zero-emission electricity generation facilities on public land and offshore waters within the jurisdiction of the United States; and

(iv) ending subsidies for fossil fuel development on both public and private land;

(C) invest in energy efficiency programs paired with electrification measures, including household weatherization and high efficiency electric heating and cooling systems;

(D) expand interregional transmission capacity and planning to promote widespread and reliable zero-emission electrification;

(E) adopt and expand the use of technologies and processes that will make the electric power grid more resilient, reliable, and efficient;

(F) improve commercial, infrastructural, and manufacturing capacity for zero-emission electrification, including by—

(i) identifying and encouraging best practices for organizing electrification markets across communities and streamlining local regulations and permitting requirements;

(ii) upgrading home-load centers to support the power supply necessary for widespread household electrification;

(iii) setting national standards for electrification projects that align electrification markets across jurisdictions, while still allowing for private sector innovation and technological advances; and

(iv) expanding and electrifying manufacturing facilities so that the United States can produce and export products made with clean energy;

(G) increase the available financing for zero-emission electrification supporting technologies at all scales, from utility-scale power stations and transmission lines to individual homes and businesses, including by—

(i) providing seed funding for a clean energy and sustainability accelerator that will leverage public and private investment in zero-emission electricity across the United States;

(ii) adopting policies to increase available financing for distributed zero-emission electricity generation, especially by low- and moderate-income households and individuals historically denied access to credit;

(iii) increasing financial incentives at the Federal, State, and local levels for domestic manufacturing of electric appliances, vehicles, technologies, and systems; and

(iv) creating accessible financing mechanisms to make electrification projects affordable for all households, including for both homeowners and renters, across rural, urban, suburban, and Tribal communities across the United States;

(H) expand access to, and increase the quality of, higher education, vocational training, and certification programs for workers contributing to the goals described in paragraph (1) and the objectives described in paragraph (2) with an emphasis on—

(i) ensuring and encouraging access to those programs for—

(I) low-income individuals; and

(II) people of color;

(ii) eliminating gender-based and race-based pay gaps;

(iii) protecting the right of workers to organize and bargain collectively; and

(iv) rehiring through place-based policies and retraining of energy veterans;

(I) facilitate the modernization of Federal, State, and local building, electric, and other codes to encourage the adoption of low-cost zero-emission electricity resources, including through grant and technical assistance programs;

(J) invest in achieving full access to zero-emission electricity for rural and Tribal communities through a combination of new transmission and distribution, and new generation, such as through distributed solar and microgrids;

(K) pursue a Federal Government-wide approach to zero-emission electrification;

(L) increase understanding of the health impacts of indoor and outdoor air pollution created by fossil fuel appliances and electricity generation, especially on the most vulnerable members of society;

(M) invest in research, development, and demonstration on the efficient use, recycling, and waste management of materials used in clean energy technologies, including the sustainable sourcing and recycling of critical minerals used in the technologies; and

(N) increase research, development, and demonstration funding for the next generation of cutting-edge zero-emission electricity resources, deployment techniques, and grid modernization technologies.

AMENDMENTS SUBMITTED AND PROPOSED

SA 1498. Mr. SASSE submitted an amendment intended to be proposed by him to the bill S. 1260, to establish a new Directorate for Technology and Innovation in the National Science Foundation, to establish a regional technology hub program, to require a strategy and report on economic security, science, research, innovation, manufacturing, and job creation, to establish a critical supply chain resiliency program, and for other purposes; which was ordered to lie on the table.

SA 1499. Mr. COTTON submitted an amendment intended to be proposed by him to the bill S. 1260, supra; which was ordered to lie on the table.

SA 1500. Mr. GRASSLEY submitted an amendment intended to be proposed by him to the bill S. 1260, supra; which was ordered to lie on the table.

SA 1501. Mr. GRASSLEY submitted an amendment intended to be proposed by him

to the bill S. 1260, supra; which was ordered to lie on the table.

SA 1502. Mr. SCHUMER proposed an amendment to the bill S. 1260, supra.

SA 1503. Ms. MURKOWSKI (for herself, Mr. RISCH, Mr. CRAMER, Mrs. CAPITO, Mr. TILLIS, Mr. SULLIVAN, Mr. MANCHIN, Mr. DAINES, Mr. LANKFORD, and Ms. SINEMA) submitted an amendment intended to be proposed to amendment SA 1502 proposed by Mr. SCHUMER to the bill S. 1260, supra; which was ordered to lie on the table.

SA 1504. Mr. JOHNSON (for himself and Mr. COTTON) submitted an amendment intended to be proposed to amendment SA 1502 proposed by Mr. SCHUMER to the bill S. 1260, supra; which was ordered to lie on the table.

SA 1505. Mr. WYDEN (for himself and Mr. SCHUMER) submitted an amendment intended to be proposed to amendment SA 1502 proposed by Mr. SCHUMER to the bill S. 1260, supra; which was ordered to lie on the table.

SA 1506. Ms. ERNST submitted an amendment intended to be proposed by her to the bill S. 1260, supra; which was ordered to lie on the table.

SA 1507. Ms. ERNST (for herself, Mr. JOHNSON, and Mr. MARSHALL) submitted an amendment intended to be proposed by her to the bill S. 1260, supra; which was ordered to lie on the table.

SA 1508. Ms. ERNST (for herself, Mr. MARSHALL, and Mr. CORNYN) submitted an amendment intended to be proposed by her to the bill S. 1260, supra; which was ordered to lie on the table.

SA 1509. Ms. ERNST submitted an amendment intended to be proposed by her to the bill S. 1260, supra; which was ordered to lie on the table.

SA 1510. Ms. ERNST (for herself and Ms. SINEMA) submitted an amendment intended to be proposed by her to the bill S. 1260, supra; which was ordered to lie on the table.

SA 1511. Ms. ERNST submitted an amendment intended to be proposed by her to the bill S. 1260, supra; which was ordered to lie on the table.

SA 1512. Ms. ERNST submitted an amendment intended to be proposed by her to the bill S. 1260, supra; which was ordered to lie on the table.

SA 1513. Ms. ERNST submitted an amendment intended to be proposed by her to the bill S. 1260, supra; which was ordered to lie on the table.

SA 1514. Ms. ERNST (for herself and Ms. HASSAN) submitted an amendment intended to be proposed by her to the bill S. 1260, supra; which was ordered to lie on the table.

SA 1515. Ms. ERNST submitted an amendment intended to be proposed by her to the bill S. 1260, supra; which was ordered to lie on the table.

SA 1516. Ms. ROSEN (for herself and Ms. COLLINS) submitted an amendment intended to be proposed to amendment SA 1502 proposed by Mr. SCHUMER to the bill S. 1260, supra; which was ordered to lie on the table.

SA 1517. Mr. TILLIS (for himself and Ms. HIRONO) submitted an amendment intended to be proposed to amendment SA 1502 proposed by Mr. SCHUMER to the bill S. 1260, supra; which was ordered to lie on the table.

SA 1518. Mr. JOHNSON submitted an amendment intended to be proposed to amendment SA 1502 proposed by Mr. SCHUMER to the bill S. 1260, supra; which was ordered to lie on the table.

SA 1519. Mr. JOHNSON submitted an amendment intended to be proposed by him to the bill S. 1260, supra; which was ordered to lie on the table.

SA 1520. Mr. JOHNSON submitted an amendment intended to be proposed by him to the bill S. 1260, supra; which was ordered to lie on the table.

SA 1521. Mr. JOHNSON submitted an amendment intended to be proposed by him

to the bill S. 1260, supra; which was ordered to lie on the table.

SA 1522. Mr. JOHNSON submitted an amendment intended to be proposed by him to the bill S. 1260, supra; which was ordered to lie on the table.

TEXT OF AMENDMENTS

SA 1498. Mr. SASSE submitted an amendment intended to be proposed by him to the bill S. 1260, to establish a new Directorate for Technology and Innovation in the National Science Foundation, to establish a regional technology hub program, to require a strategy and report on economic security, science, research, innovation, manufacturing, and job creation, to establish a critical supply chain resiliency program, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

SEC. ____ . AUTHORIZATION OF APPROPRIATIONS FOR THE DEFENSE ADVANCED RESEARCH PROJECTS AGENCY.

Notwithstanding any other provision of law, there is authorized to be appropriated for the Defense Advanced Research Projects Agency \$7,000,000,000 for each of fiscal years 2022 through 2026.

SA 1499. Mr. COTTON submitted an amendment intended to be proposed by him to the bill S. 1260, to establish a new Directorate for Technology and Innovation in the National Science Foundation, to establish a regional technology hub program, to require a strategy and report on economic security, science, research, innovation, manufacturing, and job creation, to establish a critical supply chain resiliency program, and for other purposes; which was ordered to lie on the table; as follows:

At the end of title III of division B, add the following:

SEC. 2309. PROHIBITION AGAINST FEDERAL FUNDING FOR FOREIGN ENTITIES OF CONCERN.

(a) INELIGIBILITY FOR FEDERAL FUNDING.—Notwithstanding any other provision of law, a foreign entity of concern (as defined in section 2307(a)(1)) may not receive any Federal funding under this division.

SA 1500. Mr. GRASSLEY submitted an amendment intended to be proposed by him to the bill S. 1260, to establish a new Directorate for Technology and Innovation in the National Science Foundation, to establish a regional technology hub program, to require a strategy and report on economic security, science, research, innovation, manufacturing, and job creation, to establish a critical supply chain resiliency program, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

SEC. ____ . ENHANCED AUTHORITY TO SHARE INFORMATION WITH RESPECT TO MERCHANDISE SUSPECTED OF VIOLATING INTELLECTUAL PROPERTY RIGHTS.

Section 628A of the Tariff Act of 1930 (19 U.S.C. 1628a) is amended—

(1) in subsection (a), by striking paragraph (1) and inserting the following:

“(1) shall provide to the person information that appears on the merchandise, including—

“(A) its packaging, materials, and containers, including labels; and

“(B) its packing materials and containers, including labels; and”;

(2) in subsection (b)—

(A) in paragraph (3), by striking “; and” and inserting a semicolon;

(B) in paragraph (4), by striking the period at the end and inserting “; and”;

(C) by adding at the end the following:

“(5) any other party with an interest in the merchandise, as determined appropriate by the Commissioner.”.

SA 1501. Mr. GRASSLEY submitted an amendment intended to be proposed by him to the bill S. 1260, to establish a new Directorate for Technology and Innovation in the National Science Foundation, to establish a regional technology hub program, to require a strategy and report on economic security, science, research, innovation, manufacturing, and job creation, to establish a critical supply chain resiliency program, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

SEC. ____ . REPORT ON ACHIEVING SUPPLY CHAIN TRANSPARENCY.

Not later than 180 days after the date of the enactment of this Act, the Commissioner of U.S. Customs and Border Protection shall submit to Congress a report that—

(1) assesses how limited supply chain visibility hinders the ability of U.S. Customs and Border Protection to identify and conduct enforcement actions with respect to articles imported in violation of the customs and trade laws of the United States, including articles produced with forced labor or with respect to which unfair subsidies were provided;

(2) identifies the types of information U.S. Customs and Border Protection would require to achieve supply chain transparency;

(3) identifies the parties who would be required to submit those types of information to U.S. Customs and Border Protection;

(4) assesses how U.S. Customs and Border Protection would store and utilize that information; and

(5) provides estimates of the costs to collect, store, and utilize that information.

SA 1502. Mr. SCHUMER proposed an amendment to the bill S. 1260, to establish a new Directorate for Technology and Innovation in the National Science Foundation, to establish a regional technology hub program, to require a strategy and report on economic security, science, research, innovation, manufacturing, and job creation, to establish a critical supply chain resiliency program, and for other purposes; as follows:

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the “United States Innovation and Competition Act of 2021”.

(b) TABLE OF CONTENTS.—The table of contents for this Act is as follows:

Sec. 1. Short title; table of contents.

DIVISION A—CHIPS AND O-RAN 5G EMERGENCY APPROPRIATIONS

- Sec. 1001. Table of contents.
- Sec. 1002. Creating Helpful Incentives to Produce Semiconductors (CHIPS) for America Fund.
- Sec. 1003. Appropriations for wireless supply chain innovation.

DIVISION B—ENDLESS FRONTIER ACT

- Sec. 2001. Short title; table of contents.
- Sec. 2002. Definitions.
- Sec. 2003. Sense of Congress.
- Sec. 2004. Interagency working group.
- Sec. 2005. Key technology focus areas.

TITLE I—NSF TECHNOLOGY AND INNOVATION

- Sec. 2101. Definitions.
- Sec. 2102. Directorate establishment and purpose.
- Sec. 2103. Personnel management.
- Sec. 2104. Innovation centers.
- Sec. 2105. Transition of NSF programs.
- Sec. 2106. Providing scholarships, fellowships, and other student support.
- Sec. 2107. Research and development.
- Sec. 2108. Test beds.
- Sec. 2109. Academic technology transfer.
- Sec. 2110. Capacity-building program for developing universities.
- Sec. 2111. Technical assistance.
- Sec. 2112. Coordination of activities.
- Sec. 2113. Reporting requirements.
- Sec. 2114. Hands-on learning program.
- Sec. 2115. Intellectual property protection.
- Sec. 2116. Authorization of appropriations for the Foundation.
- Sec. 2117. Authorization of appropriations for the Department of Energy.

TITLE II—NSF RESEARCH, STEM, AND GEOGRAPHIC DIVERSITY INITIATIVES

- Sec. 2201. Chief Diversity Officer of the NSF.
- Sec. 2202. Programs to address the STEM workforce.
- Sec. 2203. Emerging research institution pilot program.
- Sec. 2204. Personnel management authorities for the Foundation.
- Sec. 2205. Advanced Technological Manufacturing Act.
- Sec. 2206. Intramural emerging institutions pilot program.
- Sec. 2207. Public-private partnerships.
- Sec. 2208. AI Scholarship-for-Service Act.
- Sec. 2209. Geographic diversity.
- Sec. 2210. Rural STEM Education Act.
- Sec. 2211. Quantum Network Infrastructure and Workforce Development Act.
- Sec. 2212. Supporting Early-Career Researchers Act.
- Sec. 2213. Advancing Precision Agriculture Capabilities Act.
- Sec. 2214. Critical minerals mining research.
- Sec. 2215. Caregiver policies.
- Sec. 2216. Presidential awards.
- Sec. 2217. Bioeconomy Research and Development Act of 2021.
- Sec. 2218. Microgravity utilization policy.

TITLE III—RESEARCH SECURITY

- Sec. 2301. National Science Foundation research security.
- Sec. 2302. Research security and integrity information sharing analysis organization.
- Sec. 2303. Foreign government talent recruitment program prohibition.
- Sec. 2304. Additional requirements for Directorate research security.
- Sec. 2305. Protecting research from cyber theft.
- Sec. 2306. International standards development.
- Sec. 2307. Research funds accounting.
- Sec. 2308. Plan with respect to sensitive or controlled information and background screening.